Sex Disabil (2017) 35:119–129
DOI 10.1007/s11195-016-9467-3

ORIGINAL PAPER

Perception of Iranian Patients with Cancer Regarding Sexual Health: A Content Analysis Study

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Published online: 10 December 2016

Abstract Sexual health is one of element of general health that has great impact on the health of people with cancer. It has been expressed as a strategy to achieve the millennium development goals. In a review of literature, it was found that there are not qualitative researches on sexual health of individuals with cancer in the background of Iranian culture. The purpose of this study was to explore the perceptions of Iranian patients with cancer regarding sexual health. The study took a qualitative approach. Semi-structured interviews were held with 27 patients with cancer in Iran. Transcripts of the interviews underwent conventional content analysis, and categories emerged. The findings came under 4 major categories: physical health, psychological health, informational health, and socio-cultural health. The major categories also included several subcategories that were explained with the statements of patients. Findings of the current study have the potential to identify sexual health of individuals with cancer in the context of Iranian culture. Our results recommend that all health care providers should work to remain sensitive to sexual health of people with cancer.

Keywords Cancer · Content analysis · Iran · Patient · Sexual health

Introduction

Cancer is one of the major reasons of human death in the world but its mortality rates have been in continual decline for the past two decades [1]. It is a growing problem in Middle Eastern countries [2]. In Iran, this problem is the third most common cause of death, after

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heart disease and road accidents [3]. Regrettably, the cultural ideas about it are still present among Iranian people, demonstrating that cancer is a taboo subject and its taboo has not yet been broken. In Iran talking about cancer is very challenging. There is a general idea in Iranian culture that cancer diagnosis is considered as a symbol of death [4].

Sexuality is a key factor in human experiences, which varies among different types of cancers. Thus, patients with cancer experience long-term sexual problems [5]. In fact, sexuality is an important aspect of the lives of many people with disabilities [6]. It is a chief problem that individuals want to address in therapeutic encounters after the onset of a disability or disease [7]. Individuals with disabilities have issued notions of normal and desirable embodiment and sexuality [8]. A general idea is that disability is equal with asexuality. This idea states that disabled bodies prevent persons from experiencing sexual attractions, desires and behaviors [6]. Individuals with physical disability, particularly with one that is observable, are seen as asexual because they are deprived of both sexual attractiveness and the possibility of having sex. In addition, persons with disabilities are deprived of appropriate support in the development of their sexuality. There are many stereotypes about individuals with physical disabilities which present them as deprived of the attributes of sexuality (sexual attractiveness, sexual needs, possibilities of their physical realization) [9]. If people extend a negative outlook about their disability, then their sexuality will be unpleasantly disturbed [6].Estimates of the prevalence of sexual dysfunction after cancer range from 40 to 100% [10]. In fact, cancer was identified as a factor that affects sexual health in a negative way [11].

Sexual health is defined as a status of physical, emotional, mental and social well-being relating to sexuality, and is not merely the absence of disease, dysfunction or infirmity [12]. Therefore, it can be involved in a number of ways that affect the physical, psychological, interpersonal, and behavioral aspects of a person. The most common sexual health issue for patients with cancer is loss of desire for sexual activity [13]. Thus, people with cancer need to be adequately counseled on the effects of cancer on their sexual health. Sexual health has become very important for patients with cancer and they should be offered sexual counseling about it. In this regard, cancer clinics should offer a specific consultation for sexual health [14]. In spite of the health care provider's awareness of the value of discussing sexual health, evaluation of sex is not generally a part of regular cancer care across the world [10]. Similarly, sexual health counseling has not yet become a part of oncology care in Iran.

A wide range of studies about sexual health of persons with cancer has been documented. Sexual health concerns of patients with cancer in the USA were assessed. People with prostate cancer were most concerned about being able to satisfy their partners while patients with breast cancer were most concerned with changes in how their bodies worked sexually [15]. In another study, sexual dysfunction following rectal cancer in the USA was evaluated. Bowel dysfunction and erectile dysfunction were the main sexual health issues for the patients [16]. Based on the results of one study in Sweden before treatment of men with penile carcinoma, sexual dysfunctions were common among them, particularly decreased sexual interest and dyspareunia [17]. Findings of another study in China showed that poor sexual life satisfaction was common among patients with bladder cancer [18]. Indeed, a study in Iran indicated that 47% of women with genital and breast cancers had sexual dysfunction [19].

Individuals with cancer usually have sexual health problems in Iran but the influence of cancer on the occurrence of these problems remains unclear. In a review of literature, it was found that there are not qualitative researches on sexual health of patients with cancer in the background of Iranian culture. It is therefore suitable to perform a qualitative study

in this regard. The aim of this study was to explore the perceptions of Iranian patients with cancer about sexual health.

Methods

A qualitative study was conducted during 2015. Using qualitative approach in our study can help the researcher enter into perceptual world of people with cancer and comprehend their insights regarding sexual health. In present study, the content analysis approach was conducted. It is a shaped coding and categorizing method that can be used to unobtrusively discover a great amount of documented data. It is possible to distill words into fewer content-related categories [20]. In our study, conventional content analysis was used. It is generally employed with a study design whose goal is to describe a phenomenon. It is typically appropriate when research data on a phenomenon is limited. Researchers immerse themselves in the data to permit new understandings to emerge, also explained as inductive category progress. In this method, categories are obtained from information during analysis [20].

Participants

Our research was carried out in the cancer wards of two teaching hospitals specializing in the treatment of persons with cancer in Tehran, Iran. The patients were recruited from the cancer wards through purposeful maximum variation sampling. Twenty-seven married patients with cancer took part: 17 females and ten males. Their ages ranged from 29 to 51. The participants' level of study ranged from elementary school to bachelor's level. About type of cancer, nine persons had breast cancer, eight patients colorectal cancer, six persons gynecological cancer and four persons had prostate cancer. The time spent from diagnosis of cancer was from 2 to 4 years.

Ethical Considerations

The study sought Human Subjects Approval from the Research Committee of the Tehran University of Medical Sciences before conducting the interviews. The data collection was carried out after obtaining a signed informed consent form from the participants. Participants were informed that they had the right to withdraw from the study at any time. They were promised that their reports would be kept confidential.

Data Collection and Analysis

Face-to-face, semi-structured interviews lasting around 40–50 min were held in silent locations on the cancer wards. Each patient was interviewed once. Thus, 27 interviews were done. Participants were interviewed over a period of 3 months. The interviews were audio recorded and then implemented in the Persian language. Some parts of the interviews that were relevant to present article were translated into English by a professional translator and then the English form was converted back into Persian for verification by the second author. The key question asked in the interviews was: 'What is your opinion of sexual health?' Probing questions were also asked to follow the patients' notions and make their answers clear during the interviews, such as: "Would you further clarify your answer

regarding this?", "What is the meaning of that idea?", and "Could you please give me an example in order to assist us to correctly comprehend your attitude?"

The data collection and analysis proceeded together. When categories had been clarified and data saturation reached, the interviews were ended. Content analysis was used to categorize the data. The following phases were taken [20]:

- The interview transcripts were assessed several times in order to explore a sense of the whole.
- The text was divided into condensed meaning units.
- The condensed meaning units were summarized with codes.
- The codes were organized into subcategories and categories, based on evaluations of their similarities and differences.
- Categories were generated as descriptions of the cover content of the text.

The trustworthiness of present study is supported by four criteria: credibility, dependability, conformability, and transferability [20]. Credibility was promoted by member checking, peer debriefing and holding collaborative sessions. An audit trail, categories, and description were used to preserve participants' notions which helped to promote dependability. To obtain conformability, all the actions were recorded, and a report was arranged on the research progression. To obtain data transferability, study documents were kept safe, and attempts were made to express research methodology as extensively as possible, so that this measure of study application to other settings could be ensured.

Findings

As perceived by patients with cancer, sexual health encompasses categories of physical health, psychological health, social, cultural and informational health.

Physical Health

This category includes subcategories of sexual activity after contracting cancer and sexual activity after treatment. In fact participants experienced sexual dysfunction due to physical involvements after contracting cancer and going through related treatments.

"Sexual health is rooted in physical health, and is not apart from it. Cancer affects physical health as it involves organs and reduces sexual arousal"(Participant 19). "Since diagnosed with cancer I have not had have enough sex, I think the disease has made me lose the ability to have intercourse"(P1).

Also, treatment of cancer caused disorder in the daily routines and activities, such as walking or traveling, it left negative effects on the patients' sexuality: "Chemotherapy depleted my energy, so I could not go walking anymore. Every day I went out for a walk I felt sexually charged… I think exercise and regular physical activity would bring sexual health one way or another"(P16)."We could not travel since I got cancer whenever we went on a trip my sexual desire multiplied… due to long-term therapy and physical defects developed, I was banned from traveling and I sexually got turned off" (P7).

In the words of the participants, sexual health could not be initiated due to dyspareunia caused by vaginal dryness after treatment:" Chemotherapy affected my sexual relationship with my spouse, I feel pain, so unbearably painful that I force myself to tighten. I use lubricant gel in order to feel less pain" (P9).

Psychological Health

This category includes subcategories of concerns and fears relating to sexual health. Concerns that patients were involved with, resulted from the disease. "Being sexually health means women and men attain peace together to help one another to achieve this sexual tranquility, but when it comes down to cancer there is always concerns that keep women and men from reaching peace"(P20). "Sexual health is directly linked to sex satisfaction… When my husband gets satisfaction out of sex he makes me feel having more libido… The converse is also true, sexual dissatisfaction caused by illness is embarrassing; this being so, none of the parties would ever experience sexual pleasure"(P27).

Part of the concern of the patients which hurts their sexual health was directly because of the involvement of some organs of the body that ultimately deteriorated the sexual function of people with cancer: "That I finally would lose part of my intestine by cancer surgery became a concern to me, my mind is preoccupied with it so much so that I'm not sexually stimulated anymore "(P11)."I did not feel good after mastectomy, what I mean is I was not mentally prepared to enjoy sex, I had a strange concern that dulled my sex drive"(P4). "Because prostate was involved, colossal pressure was exerted on my bladder and I had to go to the bathroom at short intervals…. all this embarrassed my husband, saying he was not satisfied with our relationship. By the same token, I am also very worried"(P14).

On the other hand, the fear of losing hubby the patients insisted on having sex: When I was going through chemotherapy, I attempted intercourse reluctantly merely for fear of losing my husband and keep our carnal knowledge going"(P3).

In addition, developing fear of exposing the surgery site, and partner's avoiding sexual relations because of stoma, constituted reasons of intimacy avoidance in patients: "I underwent breast-lift surgery, and during intimacy I fear my husband would see it gone, I'd rather not have a relationship… "(P21). "I have developed a feeling of sexual displeasure ever since colon cancer was confirmed, I neither get pleasure out of my better half, nor go up to him, I'm afraid he would ignore me for the bad breath caused by intestines"(P6).

Informational Health

The category of informational health included subcategories of getting current sexual information and prospective sexual information for patients with cancer. As for the subcategory "current sexual information" the participants underlined the importance of gaining information associated with sexual health by doctors and medical staff: "The more information we get about sexual issues in cancer, the better sexual health we will have. Even more sexual desire will be also developed in a relationship"(P12). "Sexuality is not defined for people with cancer by doctors; they are not crystal-clear and are ambiguous"(P10)."It is best that sex education courses be provided for us to cope with our sexual health demands"(P17).

Patients with cancer seek answers as to the effect of cancer on their sexuality, to which they did not receive an answer: "After I got sick, I did not have good sexual relations with my husband, I did not enjoy like old days, I was so eager to know how cancer affects sexual relationship. But I did not get any explanation from doctor"(P5).

In the subcategory of gaining prospective sexual information, patients demanded information which would help them with their sexual health in the future: "I love my wife so much and I would like our sex life roll back into what it was just before the disease. I

have absolutely no idea if I will be able again to have an easy sexual intimacy or not? There's a big question mark in my mind! "(P23).

The possibility of cancer recurrence and metastasis existed for patients as they were uncertain about having stable sexual relations: "Part of my colon was removed, but the question remains that whether my sexual relations will be corroded again if other sections of my intestine get struck with cancer one more time?, Or could it keep going? "(P22).

Socio-Cultural Health

Explanations of participants indicated that sexual health has subcategories of cultural health and social health. They believe that owing to cultural reasons it is not an easy task to discuss sexual issues, and they feel ashamed in this respect: "Enjoying sexual health is one of the ways to family stability, an issue of grave importance; especially for us who have cancer is more important. But in our country, due to traditional and cultural conditions prevailing in the society, talking about sexual issues is unfortunately limited for us, and we would shy away from talking about these matters" (P25).

Patients prefer to hide it from their husbands if they did not reach orgasm, because culturally there was a possibility of separation from their husbands. "Although I had many sexual problems such as orgasm, I dealt with it like a secret and I did not wanted to reveal them, I did not mention anything to my husband, and chances were he might have abandoned me and our lives would have fallen apart. Men easily abandon their wives because of cancer, while women are not like that" (P26).

From the perspective of participants, a healthy sexual relationship is one that is accepted based on convention, religion and social values. In an unequal battle, sex differences in Iran cause freedom for men and restrictions on these relationships for women, both of these scenarios may endanger sexual health: "In our country, if a man suffering from cancer gets separated from his wife, he can easily get into a sexual relation with other women… though all he intends is to quench his sexual urges, he commits high-risk sexual behaviors which are detrimental to sexual health!"(P24).

"After having had a mastectomy, no man would marry me because of physical defect, at last I married a man whose wife had died and was much older than me! That is the way in our society! To put it in a better way, they stigmatize us! On the other hand, if a woman fails to get married because of cancer, she will legally face obstacles in order to meet her sexual gratifications! Well, this can greatly decline sexual health" (P18).

According to the patients, there is another form of sexual inequalities in marital relations which are rooted in the culture: "Even after prostatectomy, men can easily express their sexual feelings and reveal their sexual drives, while culturally women couldn't help but feel stifled and fail to adequately express their sexuality and their sexual desires" (P13)."Although seriously ill, I still have a high sexual desire, but cannot initiate sex, I must wait for my husband because it is established in this way that even men have the right to start on a sexual relationship…." (P15).

On the other hand, what would help provide sexual health for the patients in the subcategory of public health was to benefit from good economic situation: "I think the less economic problems, the more the tendency to make sexual relationship as well as continued relationship" (P8). "…my income is low, I lost my job because of illness and treatments, generally speaking I am not happy with life, I believe I can't even think of sexual health… when economy limps along, unhealthy sex will then happen" (P2).

Discussion

The aim of this study was to explore the perceptions of Iranian patients with cancer regarding sexual health. According to the findings it was revealed that the sexual health of people with cancer comprises categories of physical health, psychological health, informational health and social-cultural health.

In the category of physical health, patients accounted that this area of their sexual health was ruined after having cancer; and, for this reason their sexual health was met. In this respect, the findings of previous studies in Korea and Taiwan found that the sexual health of people with cancer in the area of physical health was disturbed and kept at a lower level [21, 22]. Also, results of studies done in France, Poland and China support the findings. As it was mentioned in the aforementioned studies, sexual health of patients after getting cancer was messed up [23–25].

Ironically, according to the results of a study in Australia, although people with cancer were physically changed in the early stages of treatment, they did not go through any significant changes in terms of sexual function [26].

The participants in our study said that after cancer treatment due to developing disorders in their physical health, they also suffered some degrees of impaired quality of sexual health. The results of studies conducted in Italy and Sweden showed that men with cancer suffered from reduced libido and orgasmic disorders following cancer treatment, and in general they developed very low post-treatment sexual activity [27, 28]. In addition, according to the results of a research conducted in the Netherlands, treatment of cancer had negative effects on the physical health of patients and left them with sexual dysfunction [29, 30]. However, results of studies conducted in China and Germany showed that individuals with cancer were happy with their sex life after treatment [31, 32].

Disruption to workouts and traveling accounted for other factors leading to lack of sexual health as it threatened physical health, having had emerged after contracting and treating the disease. According to patients, chemotherapy associated with complications such as dryness and vaginal spasms lead to impaired sexual health in the area of physical health, for which vaginal gels were used to get rid of the problem. Results of a research in Germany revealed that vaginal therapy helps improve the sexual health and sexual quality of life of women with cancer [33]. The results of this part of the study were indicative of the attention paid to that area of sexual health that gets damaged after cancer and the treatment process, thus reducing person's physical health. Psychological health is identified as another category of sexual health for patients in this study. Under this category, patients spoke of concerns and fears which threatened sexual health in the area of psychological health. These fears and concerns eventually led to failed sexual intimacy; and therefore, not enjoying the relationship. Similarly, individuals with cancer in Taiwan gained lower scores on the psychological dimension of their sex life, and experienced avoidance in their sexual relationship [22, 34].

The majority of patients' concerns related to sexual dissatisfaction and concern over lack of bodily organs. As well, some of their concerns were in connection with their husbands becoming upset during sex that was directly linked with their disease. For instance, urinary frequency during coitus led to the patients' concern. In keeping with our findings, one study conducted in France also showed that factors such as poor urinary function in men had reduced their spouses' sexual quality of life [35].The Iranian women's spouses with cancer had experienced disorders in sexual relationship, avoidance of sexual intimacy and sexual limitation which altogether caused concerns for them [36].

Furthermore, continued preoccupation about the defect and fear of exposing the surgery site during sex, and being afraid of losing the mate were always there for the participants. Although the fear of the surgery site being seen hindered effective sexual relationship; the fear of losing husband helped continue the relationship. A relevant research carried out in Bahrain showed that women with cancer committed themselves to provide for the sexual needs of their spouses. As a matter of fact, the fear of her husband's re- marriage and losing him made them to meet partner's sexual needs under all circumstances [37]. This is, however, worth noting that Iranian women realize that having sexual relationship with their husbands is one of the factors reinforcing the family life. So, for this very reason they try to fulfill the sexual needs of their husbands one way or another; even if this involves fears of losing him.

According to the results of the current study, informational health constituted another sexual health category for individuals with cancer. In this regard, patients needed to acquire current and prospective sexual information in order to remove their ambiguities in the context of sexuality, and how cancer affects sexual relations in the present; their informational needs about the possibility of sexual relations stability as well as their being sustained in the future. As believed by the patients, their informational needs had been ignored by doctors and medical staff in this regard, and despite the fact that they were very willing to know, unfortunately, they did not received any response from the doctors. In line with these findings, a study in Sweden showed that people with cancer have not received the required information about sexual issues from health care providers [38]. In another study it became known that the Moroccan women with cancer have not received any information about their sexual problems from doctors [39]. These results indicate that providing information about sexual problems is essential in order to improve the informational health of individuals with cancer because, as researchers believe, receiving sufficient information from doctors about these issues leads to the patient's adapting better to cancer.

The category of cultural and social health was another one constituting sexual health for patients with cancer. Our study showed that sexual health of patients in Iran is deeply influenced by the element of culture. According to the findings, people with cancer live in a cultural matrix that nurtures the possibility of separation from spouse. This possibility stems from the moment when the partner realizes that she doesn't reach orgasm. Also, results of a study revealed that sex life of Brazilian women with cancer was influenced by cultural aspects, so much so that it can harm the stability of sex life with your partner [40]. Certain cultural limitations as well as some sexually-related issues being deemed wrong were the building blocks of some wrong beliefs among people in Iran. As told by the participants, there is a false belief that if a woman initiates sex, her husband believes that she has committed an immoral act. Also, in the current study, women with cancer feel shame to express their sexual feelings with their spouses. In fact, talking about sexual relationship was associated with shame for patients; which is considered a cultural taboo. Similarly, results of other studies in Taiwan and Iran also showed that people with cancer feel shame to express their sexual problems [34, 41].

On the other hand, sex outside marriage for women is forbidden in Iran, and this relationship is defined in a specified context, in a manner that women are not allowed to have sexual relation with anyone unless this companionship is legally sanctioned and prescribed into the institution of marriage. While socio-cultural norms for men are in a way that they are absolutely free to establish sexual relations. Thus, the needs related to sexual health of women with cancer are repressed for cultural reasons; because, according to the

participants, the women with cancer are not chosen by men for marriage, and their having cancer is a stigma which is not easily wiped out by the community.

According to patients, sexual relations outside marriage, which ruins sexual health, is there for men, and men do not even encounter social reprimands. This gender inequality is rooted in socio-cultural values, a wake-up call to the sexual health of the people with cancer. On the one hand, unhindered sex makes men prone to a range of sexually transmitted diseases; and, on the other hand, it is likely that refusing to grant women the right to seek answers in the realm of sexual needs might cause sexual health to the women with cancer, under the category of socio-cultural health, to wither. However this would not mean to evade ignoring sexual instincts, because taking these instincts into consideration is natural and desirable, while quenching these instincts by women is only allowed under customary conditions and within the boundaries of marriage. What has been outlined thus far necessitates educating persons with cancer in the field of developing positive cultural attitude towards sexual relations, and regulating sexual relationships for these patients.

The participants in our study said: "if the patient is well situated financially, her sexual health is partly maintained too. In this regard, results of a research showed that sexual gratification of Taiwanese people with cancer proved to be better under good financial conditions [5]. The findings indicate the need for social supports for patients with cancer in order to improve their sexual health.

This study had some limitations as well. Choosing the patients was not based on a certain type or stage of cancer. The small sample size and the nature of the study limited the ability to generalize the results. However, as with all qualitative researches, the findings were not intended to be generalized. Nevertheless, the results of this study add to the body of knowledge in this area.

Conclusion

Overall, the findings of our study indicate that exploring sexual health in cancer patients regardless of the socio-cultural context is something wrong. As such, addressing this issue in support of people with cancer can be useful to rebuild their sex life. Accordingly, it is suggested to launch educational interventions to correct cultural beliefs of patients with cancer in a bid to improve their sexual health. It seems that in Iran mere attention to current treatments of cancer has distracted the path to the real issue of addressing different aspects of the sexual health of people with cancer; however, since our research was the very first study to investigate sexual health of these kinds of patients using a qualitative approach, it laid bare different layers of this concept. The revealing elicited helps the authorities to address it in all its dimensions, namely physical health, psychological health, informational health, and socio-cultural health if they aim to improve the sexual health of persons with cancer, because any disruption to each of these dimensions will lead to disorder in the sexual health of these patients.

Acknowledgements The researchers are thankful to all of the participants who participated in present study. Without their help and collaboration, this research could not have been performed.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

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